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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,343	04/01/2004	Dany Felix Maria Michiels	9292	8286

7590 06/12/2007
Thomas L. Moses
Legal Department, M-495
PO Box 1926
Spartanburg, SC 29304

EXAMINER

CROUSE, BRETT ALAN

ART UNIT	PAPER NUMBER
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1774

MAIL DATE	DELIVERY MODE
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06/12/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,343	Applicant(s) MICHIELS, DANY FELIX MARIA	
	Examiner Brett A. Crouse	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2-7, 9-11 and 15 is/are rejected.
- 7) ☒ Claim(s) 8, 12-14 and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Great Britain on 13 December 2003. It is noted, however, that applicant has not filed a certified copy of the GB 0328948.5 application as required by 35 U.S.C. 119(b).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-7, 9-11, and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chikaraishi et al., US 5,705,445 hereinafter known as Chikaraishi, in view of Bernard et al., US 5,411,638 hereinafter known as Bernard.

Chikaraishi teaches:

Column 3, lines 1-50, teach a woven fabric web having a coating layer wherein the coating layer is formed from an aqueous emulsion comprising an organopolysiloxane of formula (I), (a). The coating layer also comprises an alkoxy silane compound, (d). The coating layer can comprise an alkoxy silane compound having at least one epoxy group or amino group, (e).

Column 3, line 54 through column 4, line 26, teach suitable groups useful in the organopolysiloxane of formula (I), (a). Suitable groups include vinyl, epoxy, and methacryl.

Column 6, line 37 through column 7, line 2, provide exemplary alkoxy silane compounds including trimethoxy silane compounds, (d).

Column 7, lines 29-40, provide exemplary compounds of component (e). The passage provides examples in which the epoxy compound is a trimethoxy silane compound.

Column 8, lines 28-36, teach that the material of the fabric is not particularly limited and that aramid fibers in the form of filaments, staple, or combination thereof is preferred.

Column 8, lines 37-49, teach that methods for coating the fabric are not particularly limited. The passage additionally teaches dipping as a coating method.

Chikaraishi does not teach:

Chikaraishi does not teach pre-treatment of the fabric prior to application of the coating with either a plasma or epoxy compound. Chikaraishi however, does teach the use of epoxy compounds, but the epoxy containing compounds can be incorporated into one or more of the components of the aqueous emulsion.

Bernard teaches:

Column 1, lines 33-39, teach it is the objective of Bernard to provide a method for treating aramid fiber to improve its adhesion rubber.

Column 1, lines 49-58, teach the aramid filament is subject to plasma treatment followed by coating baths.

Column 5, line 66 through column 6, line 13, teach that the first bath is an epoxy resin bath.

Column 6, line 57 through column 7, line 14, teaches that the aramid fiber is preferably poly(paraphenylene terephthalamide). Additionally, the passage teaches the fibers are monofilaments formed into a cord.

Column 7, line 53 through column 8, line 42, tables 3 and 4, teaches that fibers that are treated with plasma exhibit improved tear properties over non-plasma treated fibers.

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Column 8, lines 45-59, teach that the gas used for the plasma treatment is not critical and that treatment at atmospheric pressure can be used.

Motivation to combine:

It would have been obvious to one of ordinary skill in the art to use the preferred para-aramid fiber of Bernard coupled with the plasma treatment of Bernard to improve the adhesion of the silicone coating composition of Chikaraishi in order to produce a material to form a more reliable air bag. Additionally, it would have been obvious to select from the preferred groups of Chikaraishi groups such as acryloxy (methacryl), epoxy, vinyl, and amino for the groups of the components of the coating in order to improve the coating properties as taught by Chikaraishi. Also, it would have been obvious to perform the pre-treatment of Bernard to the fabric of Chikaraishi in the order taught by Bernard, (select/provide fabric, plasma treatment, dipping) in order to achieve improved adhesion of the coating of Chikaraishi applied by a dipping step as taught as suitable by Chikaraishi.

Allowable Subject Matter

Claims 8, 12-14 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or suggest the recited composite article in which the polyaramid textile is a weft insertion warp knit fabric and respective method of making in which the polyaramid textile is epoxy activated followed by plasma activation prior to the dipping step.

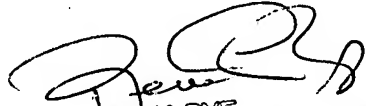
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brett A. Crouse whose telephone number is 571-272-6494. The examiner can normally be reached on Monday - Friday 6:00AM - 2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BAC


RENA DYE
SUPERVISORY PATENT EXAMINER
AU 1774